RINGKASAN

Cabai merupakan salah satu komoditas yang memiliki nilai ekonomi tinggi dan bangsa pasar yang baik. Setiap tahunnya kebutuhan cabai terus meningkat dan disertai meningkatnya juga perkembangan nematoda puru akar yang menyebabkan penurunan produksi cabai secara nyata. Nematoda puru akar termasuk golongan hama yang merugikan dan populasinya telah menyebar secara luas.

Tujuan penelitian ini untuk mendapatkan genera nematoda parasit tanaman cabai apa saja yang menyerang tanaman cabai di desa sampel, mengetahui kepadatan populasi nematoda pada pertanaman cabai di desa sampel, mengetahui populasi nematoda parasit dan non parasit pada tanaman cabai merah. Penelitian ini dilaksanakan di Kecamatan Karangreja, Kabupaten Purbalingga. Identifikasi nematoda dilakukan di Laboratorium Perlindungan Tanaman, Fakultas Pertanian, Universitas Jenderal Soedirman. Penelitian dilaksanakan pada Februari sampai dengan Maret 2017. Penelitian ini menggunakan *purposive random sampling* yang terdiri dari 1 desa pertanaman cabai, 3 ketinggian tempat, 3 ulangan, dan 9 tanaman dari setiap ulangan. Penelitian ini menunjukkan bahwa ada 2 jenis nematoda yang dominan dalam menyerang pertumbuhan tanaman cabai yaitu nematoda *Meloidogyne* sp. dan *Helicotylenchus* sp., kepadatan populasi nematoda antar ketinggian tempat menunjukkan relatif sama pada fase vegetatif maupun generatif tanaman cabai dan jumlah populasi nematoda parasit lebih besar daripada non parasit baik yang hidup pada akar dan tanah (lahan) pertanaman cabai, intensitas serangan nematoda puru akar antar ketinggian tempat pada tanaman cabai menunjukkan tidak adanya perbedaan yang nyata.

SUMMARY

Chili is one of the high economic value commodities that have and has good market. Every year the need for chili continues to increase and accompanied by the increase also the development of root nematodes that cause a decrease in chili production significantly. Root nematodes belong to a class of harmful pests and the population has spread widely.

The purpose of this research aims know the diversity genera of nematode parasitic plantsthat attack anything chili plants in village of chili sample, find out the density of populations of nematode on crops in the village of chili each sample, knowing the population of parasitic nematodes and non parasitic on red chili plants. This research was carried out in districts Karangreja, Purbalingga. Identification of the nematodes were conducted in the laboratory of plant protection, Faculty of agriculture, University of Jenderal Soedirman. . The research was conducted on February until March 2017. The research used purposive random sampling consisted of 1 village, 3 height of places, 3 replications, and 9 plants in every replications. This research indicated that there were 2 types of nematodes dominant in attacking the growth of chili plants that was nematodes Meloidogyne sp. and Helicotylenchus sp., the population density of nematodes between the altitudes shows relatively similar in the vegetative and generative phase of chili plants, the number of parasitic nematode populations was greater than non parasitic nematodes both living in roots and soil cultivation, the disease intensity of NPA between of three height on chili's crops showed not significantly different.